DOCUMENT RESUME

ED 450 994 RC 022 844

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TITLE Implementing the Aligned and Balanced Curriculum (ABC): Building Capacity for Continuous School Improvement.
PUB DATE 2000-04-00
NOTE 17p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 24-29, 2000).
PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)
EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Academic Achievement; Collegiality; *Curriculum Development; Educational Change; Educational Environment; Elementary Secondary Education; Participative Decision Making; *Rural Schools; *School Culture; School Districts; *School Effectiveness; State Standards; Teacher Attitudes; *Teacher Collaboration; Teacher Empowerment
IDENTIFIERS Capacity Building; *Curriculum Alignment; Virginia

ABSTRACT

This paper summarizes the first 2 years of a school improvement effort in a low-performing rural school district in southern Virginia that involved developing a balanced K-12 curriculum aligned with the state's standards of learning. Project evaluation focused on changes in the school environment and in teaching and learning that resulted from the curriculum alignment process. Interviews were conducted with teachers and administrators at the three district schools, and all district teachers completed pre- and post-alignment surveys assessing teacher empowerment, professional learning community, and organizational effectiveness. At the project's beginning, teachers believed they were good teachers, believed they worked with good teachers, and wanted to make a difference in children's lives. However, teachers were not meaningfully engaged in decision making, were ambivalent about the existence of a strong and shared district vision, collaborated only modestly within and across schools, and had not developed a sense of collective responsibility for student learning. By the second year, teachers were beginning to understand how curriculum alignment had positive effects on all aspects of teaching, learning, and staff interaction; schools with higher indicators of implementation had higher student achievement scores; in subjects where the curriculum was aligned, scores increased dramatically; achievement differences by socioeconomic status and gender were decreasing; and the schools were slowly developing the capacity for continuous school improvement. (TD)

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ED 450 994

Implementing the Aligned and Balanced Curriculum (ABC): Building Capacity for Continuous School Improvement

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Paper presented during the Division H New Member Session at the annual meeting of the American Educational Research Association, New Orleans, April 24-29, 2000.

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Objectives

Standards are one of the hottest "buzz words" in educational reform. National standards in the various disciplines, as well as standards developed at the state level are being taken very seriously by local school districts. Educators understand the urgency of improving student achievement and graduating well-prepared students, but are often ill-prepared themselves for implementing the major overhauls of their curricula, organizational structures, and school cultures that are necessary to effectively improve the teaching and learning in a given school. Virginia, one state in which stringent new standards and school accountability measures have been adopted, recognizes the importance of providing the necessary assistance to its school systems to meet the challenges that have been intensified by the new requirements. A multi-year curriculum alignment project in a high-need school district is seeking answers to several research questions:

- What school characteristics impact on and/or are affected by the success of implementation (e.g., culture, structure, collaboration, etc)?
- What are the indicators of implementation (i.e., how do we know it's being implemented)?
- Are the children and teachers' experiences in the classroom changing as a result of efforts to align and balance the curriculum with state standards?
- Are the administrators' experiences as school leaders changing as a result of implementing this process?
- In what ways might the Aligned and Balanced Curriculum process increase local capacity for continuous school improvement?
- Does the process help to improve student achievement?

A framework for intervention was developed through a review of the school effectiveness, school improvement, school change, and professional learning community literature that provided the foundation for the Aligned and Balanced Curriculum Process. The ABC process was implemented in a high-need rural district in Virginia. The implementation of the aligned and balanced curriculum in the selected district was examined.

Perspectives

So often, innovations appear to have failed, when the real failure is in lack of rigorous implementation or more basically, implementing an inadequate innovation. Curriculum has become a lost tool of school districts that are trying to increase student achievement. School districts often take a programmatic approach to improvement, anticipating the quick fixes or

"Band-Aid" will solve the problem. This ignores the interrelatedness of programmatic solutions. An aligned and balanced curriculum process, when implemented with fidelity, ensures programmatic focus aligned with valued outcomes. An aligned curriculum has been shown to increase student achievement and promote equity, while overcoming unearned disadvantages of income, race, gender, teacher assignment, and school size (Wishnick, 1989; Mitchell, 1998).

Although the focus of curriculum alignment is, obviously, the curriculum, it is by not means another Band-Aid solution that concentrates on only one element of the school life. By using the fulcrum of curriculum alignment, schools are leveraging whole school reform. The process itself results in changes in the structures and processes available to assist teachers to focus on student learning. The aligned and balanced curriculum provides a roadmap that sets the school on its way to becoming a professional learning community.

Description of Setting

For almost two decades, efforts to reform American public schools have recognized the importance of focusing efforts at the school level instead of at individual students or teachers (Coleman, 1966; National Commission on Excellence in Education, 1983). According to Newmann and Wehlage (1995) from the Center on Organization and Restructuring of Schools, successful school reform efforts have, as one goal, the establishment of professional communities within schools. It is not sufficient to just align curricula, raise standards and expectations, or alter decision-making structures. While all of these, as well as many other factors, are necessary, none is sufficient for raising and sustaining continuous improvement in student achievement. Schools are far too complex as organizations to be fixed with unidimensional solutions. In keeping with the underlying theme of schools as organizations, many researchers are taking a close look at many different aspects of the school environment in efforts aimed at unpacking the layered levels of variables that influence student achievement.

Practitioners, on the other hand, can quickly become overwhelmed by the complicated reform initiatives that are proposed as solutions to the complex and diverse problems faced by school improvement teams. In their efforts to nurture schools, many state departments of education are establishing technical assistance role frameworks and systems that are genuinely responsive to the complex needs of local school districts.

During the past decade, the Commonwealth of Virginia took significant steps to measure

and increase student achievement by crafting the Standards of Learning (SOLs). However, several schools and school districts across the state did not have the capacity to make all the changes required by the state. AEL, Inc. set out to assist Virginia by conducting research to learn more about providing technical assistance to high-need schools. In 1996, project staff collaborated with the Virginia Department of Education to identify and select a high-need school district willing to serve as a development site where project staff would devise and test elements of a technical assistance system to improve student academic performance. Project staff work closely with AEL's resident director in Virginia to share the knowledge learned from the development site with similar districts.

The goals of this study were to explore the characteristics of and interrelationships among the three instruments that were employed to measure the latent construct of "organizational capacity," and to create a quantitative baseline description of the three Rural County Public Schools before intensive site work began.

The Rural County Public School District

The Virginia State Project was designed to target high-need schools, which were defined as those where the initial pass rate on Virginia's Literacy Passport Test (LPT) fell below 50 percent, and which met certain other socio-demographic criteria. Schools that were likely to not pass the LPT were located in rural regions defined by high poverty levels (22% of children in poverty compared to 16% in districts that passed the 50% mark); low educational attainment of adults (48% lacking high school equivalency); and almost twice as many children (7.4% versus 3.9%) identified as being at risk, which is defined by the National Center for Education Statistics as living in a single-parent household in which the adult lacks a high school diploma and has an income below the poverty line (as cited in AEL, 1995).

The Rural County Public Schools[1] (RCPS) fit the description of a high-need district that was willing to work with AEL. Rural County is a small county in southern central Virginia, accounting for only .13% of the state's population (Quality Education Data, 1997). During the 1996-97 school year, the Rural County school district enrolled 1,300 students and employed 89 teachers. The three public schools in the county include Rural Elementary School, which encompasses Pre-Kindergarten through fifth grade; Rural Middle School, which houses sixth through eighth grades; and Rural Senior High School, with grades nine through twelve.

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[1] Rural County is used throughout this report to preserve the identity of the actual subject school division (district) in Virginia.

Since the Rural County Project began three years ago, RCPS has experienced personnel changes that may have an impact on school improvement. In addition, a new superintendent was appointed in the summer of 1998, replacing the superintendent who had negotiated the technical assistance agreement with AEL. There is a new principal at the high school and several teachers who had participated in the initial curriculum alignment training sessions are no longer working in the school district.

The overarching purpose of this project is to learn more about the technical assistance process of assisting high-need schools to develop the organizational capacity to support effective school performance and to enhance the intellectual quality of student learning (AEL, 1998).

The Virginia State Project has two main goals:

Goal 1: To gain an understanding about how to best support high-need schools to develop the organizational capacity to support effective school performance and enhance student performance on the Virginia Standards of Learning[2].

Goal 2: To recommend to the Virginia Department of Education a system/framework to provide technical assistance that will support high-need schools to develop the organizational capacity to support effective school performance and enhance student performance on the Virginia Standards of Learning.

The administration of the three instruments reported here was part of the initial effort to achieve Goal 1: to know if the approach AEL used was successful at increasing the capacity of the school district to support effective school performance.

AEL project staff are collaborating with RCPS in developing and testing a technical assistance model that builds local capacity to support continuous improvement in student performance. If the evaluation shows that the approach is effective, then it will become an approach that will be recommended to the AEL Resident Director. Following a needs assessment and strategic planning conference in RCPS, most of the work to date by the AEL project director has been toward aligning the curriculum with classroom instruction and the new statewide Standards of Learning (SOLs). Using David Squires of Yale University as the lead consultant on this effort, the English curriculum was aligned during the 1997-98 school year.

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[2] The original Goal 1 indicated that a conceptual framework would be developed by a working group that included AEL, SEA, and LEA staff. In practice, the research literature guided the development of technical assistance locally.

During the 1998-99 school year Dr. Squires has been working with teams of RCPS teachers on aligning the mathematics curriculum.

During the design phase early in the project, project staff at AEL decided to measure a variety of teacher- and building-level constructs for baseline data collection. AEL project and evaluation staff, in collaboration with Virginia Department of Education staff, met and selected three instruments to administer to all RCPS professional staff in a pre- and post-intervention design. The 12 constructs measured by these three instruments focused on (1) the capacity of the organization to engage in improvement initiatives, and (2) attributes that schools must possess to improve student achievement and sustain continuous improvement. Based on a survey of the school effectiveness, school improvement, and school change literature, project staff hypothesized that the schools' cultures would need to change dramatically in order to gain the organizational capacity to initiate and sustain continuous improvement at the close of the project. Teachers would need to be empowered to make important decisions about teaching and learning, the schools would need structures and procedures to support professional learning communities, so that teachers could develop new perceptions of their school as effective.

Organizational Capacity

Organizational capacity is a rather vague term whose definition changes depending on both the nature of the referent organization and what exactly that organization needs the capacity to do. A frequent description of capacity has been teachers' capacity to teach in new ways as well as district administrators' capacity to support more challenging instruction. Capacity in schools can be thought of from a teaching and learning perspective. Schools with high capacity for change realize that in order for sustained improvement to occur, "teachers and others must change their minds in order to change their practice" (Spillane & Thompson, 1997, p. 186). Spillane and Thompson (1997) identified the salient features of capacity, including knowledge, commitment and disposition, professional networks, trust and collaboration, time, staffing, and materials. These researchers categorized the features into physical capital, human capital, and social capital. Physical capital, such as materials, funding, and time, are essential components of capacity to the degree they support the human and social capital.

In the Virginia State Project, capacity is being defined in human and social capital terms: the confluence of teacher empowerment, professional learning community, and the organizational effectiveness characteristics as measured by the instruments. Many researchers

have examined the concept of teacher empowerment as a mechanism for improving the quality of education. The most common operationalization of empowerment has been participative decision-making structures (Weiss & Cambone, 1994). Teacher participation in decision making has been shown to lead to several positive outcomes. In two-thirds of the studies reviewed by Taylor and Bogotch (1994), participation resulted in higher teacher job satisfaction. Similar improvements were found by McCormack-Larkin (1985) and Casner-Lotto (1987). Empowering teachers is not an easy way to achieve school improvement. Shared decision making produces explicit conflict because it brings into the open conflict that had been latent. This conflict can be a sign that staff are confronting serious issues and beginning to unfreeze obsolete ways of working. In a study by Weiss and Cambone (1994), schools with committed administrators implemented somewhat more changes and more innovative changes in curriculum and scheduling than did schools with more status quo principals. Empowering teachers slowed down change, but had the advantage of defusing opposition. By the time changes were implemented in the Weiss and Cambone study, teachers had made it their own, and teacher acceptance of changes increases the probability of successful change.

Taylor and Bogotch (1994) found that teachers' feelings toward colleagues were not related to their involvement in decision making. Such a result suggests that attention might be given to ways of overcoming norms of classroom autonomy and isolation. Collegiality among all school staff is not an established norm in schools and has been more frequently discouraged by scheduling constraints than encouraged by empathetic administrators. It is possible that collegiality must be actively fostered in schools if it is to occur.

Although teacher empowerment—in the form of participative decision-making structures—is related to several positive outcomes, it has not been consistently linked to gains in student achievement (Marks & Louis, 1997). Several researchers have found participatory processes to be positively related to perceived school effectiveness (Likert, 1978; Miskel, Fevurly, & Stewart, 1979). Taylor and Bogotch (1994) did not find a significant relationship between teacher participation in decision making and student achievement. However, Rutter and colleagues (1979) found better achievement outcomes in schools where teachers reported feeling included in decision making.

In an interesting and methodologically rigorous study by Marks and Louis (1997), teacher empowerment was examined in relationship to both professional community and to student achievement. They found that when empowerment was related to improvements in

student achievement, participatory decision-making councils had explicitly concentrated on issues of curriculum and instruction. To the extent that greater numbers of teachers participated in instruction-related decision making or that schools' professional cultures were strong, instructional improvement was more likely to occur. Others have also found that if empowerment is to be useful as a school reform strategy, it must focus on instructional vision and professional collaboration (Bryk et al., 1993; David, 1994; Smylie, 1994; Smylie et al., 1996). In other research focusing on the efficacy facet of empowerment, teachers with a high sense of their own efficacy were found to be more likely to adopt new classroom behaviors (Rosenholtz, 1989).

Marks and Louis (1997) suggest that empowerment of teachers influences student learning indirectly by supporting authentic instruction through effective school organization for instruction, which these researchers operationalized as professional community and collective responsibility for student learning. Specifically, they found that empowerment explained more of the variance in professional community among schools than within schools, implying that empowerment is not solely an individual-level construct, but also a school-level phenomenon. As an organizational characteristic, teacher empowerment is positively related to school faculties' collective responsibility for student learning—teachers taking ownership over the learning process for all students, not just those in their individual classrooms. In other words, faculty empowerment results in greater school-wide attention to instruction and student learning. Professional community and collective responsibility for student learning exert a strong influence on authentic instruction at the school level. Thus, empowerment works to the academic advantage of students only when it supports teachers in changing their instruction so that it becomes more involving and demanding for students.

In the learning organization literature, shared understandings about the purpose of the organization (or school) are integral to the development of learning organization thinking and are often referred to as shared mental models (Senge, 1991). More specifically, Bennett and Brown (1995) define mental models as sets of working assumptions about what drives the organization, the consumers' needs, and the dynamics of the larger social context. Holding congruent ideas about the mission, vision, and purpose of the school serves as an important staff factor in the development of schools that are capable of continuous improvement. Sharing vision is not just agreeing with each other's ideas. Staff in learning communities are encouraged not only to be involved in the process of developing a shared vision but to use that vision as a guidepost in making decisions about teaching and learning in the school (Southwest

Educational Development Laboratory, 1997).

The workplace is a powerful learning environment for teachers, although traditionally, teachers have not been encouraged to think of themselves as learners as well. Professional community among teachers, the subject of a number of recent major studies, is regarded as an ingredient that contributes to the improvement of schools (Bryk & Rallow, 1993). A professional learning community has been defined as "a place where critical inquiry is practiced by collegial partners who share a common vision and engage in shared decision making. *This continuous critical inquiry provides a basis for seamless school improvement*" (Southwest Educational Development Laboratory, 1994, emphasis added). Community within schools is important for at least three reasons:

"First, students need clear and consistent messages about the objectives and methods of learning...Second, academic learning is hard work, and school competes for students' attention with many other activities and concerns. If teachers simply leave it up to students to choose whether or not to learn, many students will be left behind. Instead, teachers must take active responsibility for student success. Finally, effective teaching is complicated and difficult. It usually requires information, expertise and support far beyond the resources available to the individual teacher working alone in an isolated classroom. Teachers who collaborate with their colleagues are more likely to be effective with students, because they will benefit from expanded resources" (Newmann, 1994, p. 1).

Schaffer and Anundsen (1993) summarize qualities that must be present for community to exist in the workplace on an ongoing basis. It is interesting to note the overlap between these eight qualities and the constructs subsumed within empowerment and professional community. Schaffer and Anundsen's qualities include the following:

- Alignment of values between [the administration] and all employee levels,
- Employee-based structure,
- Teamwork and collaboration,
- Open communication [between teachers and administrators],
- Mutual support,
- Respect for individuality,
- Permeable boundaries [between classrooms, departments, schools], and

- Group renewal [time set aside so that conflicts can be resolved, and values, vision and milestones can be discussed and celebrated] (as cited in Zemke, 1996, p. 30).

The research reported by Bryk and Rallow (1993) is grounded in the assumption that how teachers interact with each other outside of their classrooms may be critical to the effects of reform on students. The analysis focuses on the type of professional community that occurs within a school and investigates both the organizational factors that facilitate its development and its consequences for teachers' sense of responsibility for student learning. This sense of responsibility for student learning directly affects student achievement. The findings suggest that wide variation in professional community exists between schools, much of which is attributable to structural features and human resources characteristics, as well as school level.

Miskel, Fevurly, and Stewart (1979) summed up their research on effective schools by noting that schools that are perceived by teachers to be effective are characterized by (1) more participative organizational processes, (2) less centralized decision-making structures, (3) more formalized general rules, and (4) more complexity or high professional activity. Higher levels of perceived school effectiveness were found by Miskel and colleagues to be related to greater loyalty to the principal and to high job satisfaction. In a multinational study on what makes schools effective, Townsend (1994) found that certain conditions are common across effective schools in various countries. In particular, principals, teachers, parents, and students reported that effective schools have qualified and committed leadership and staff, sound policies, and a supportive environment in which staff, parents, and teachers are encouraged to work as a team toward common goals.

In a review of effective schools, Squires, Huitt, and Segars (1986) summarized the characteristics that are present in schools in which students excel academically but which are absent in schools whose students do poorly. These researchers identified seven characteristics of high performing schools: (1) An emphasis on academics; (2) Skilled teachers, with inexperienced teachers consulting with their more experienced peers; (3) Teachers' actions in lessons, with teachers spending the majority of their time engaged in active instruction; (4) Rewards and punishments, where rewards are often given and punishments are recognized, accepted, and uniformly enforced; (5) Decent pupil conditions, including a safe and orderly environment; (6) Responsibility and participation of students in school positions of leadership and in their own learning; and (7) Staff organization emphasizing collaboration on course planning, adequate clerical help, active leadership, and shared decision making.

By reviewing the literature on effective schools, it becomes obvious that much of the factors identified as important elements of the effective school can be found in the constructs of professional learning community, teacher empowerment, and adaptability and flexibility. Taken together, the three instruments measure many of the identified aspects of effective schools.

Methods/Techniques/Modes of Inquiry

This paper summarizes the first two years of a curriculum alignment school improvement effort occurring in a low-performing school district in southern Virginia. An educational research and development organization adopted this Virginian school district as an intensive site for providing technical assistance. After initial conversations with personnel in the district, the project director from the research and development organization helped the district to articulate the most pressing needs, which resulted in bringing in a curriculum consultant to work on developing a balanced K-12 curriculum that was aligned with the state's Standards of Learning.

A major focus of the evaluation of this project is on documenting the implementation of the Aligned and Balanced Curriculum (ABC) process so that any changes in student achievement can be understood through the lens of what changes occurred in the school environment and in teaching and learning as a result of the ABC process. The mixed-method evaluation draws upon diverse data sources.

A Tale of Growth

Prior to starting the curriculum alignment process in the summer of 1997, all teachers in the district completed surveys assessing the constructs of teacher empowerment, professional learning community, and organizational effectiveness. The same set of instruments was re-administered in the spring of 1999, after the Language Arts and Mathematics curricula were aligned. These results, with the results of qualitative interviews conducted with teachers and administrators at the schools, provide in-depth insights into what impacts the ABC process has had on the school environment, and on students' and teachers' experiences in the classroom.

Results of the surveys and interviews indicated that the three schools in the district began the project in desperate need of assistance. Teachers did not feel empowered and were ambivalent about what the curriculum alignment process could do for them or their students. There was little sense of professional community among the staff, little collaboration among teachers in a single building, much less across buildings. Some of these feelings may have resulted from a lack of a

shared vision for student learning across the schools in the district. Obviously, a strong input of leadership and assistance was needed.

By the second year of implementation, teachers were becoming excited about the process. They were beginning to understand the far-reaching ways in which curriculum alignment was positively affecting all aspects of teaching, learning, and interactions among staff. The surveys were less sensitive to the changes occurring in the schools. However, significant differences in positive directions between the 1997 and 1999 administrations were found at the high school level, where departmentalization and isolation typically make professional learning communities harder to create and sustain.

In addition, by administering the surveys and conducting the interviews at several time points across the chronology of the implementation, the researchers will able to provide tentative answers to the cause-effect questions, "What school characteristics impact on the success of implementation?" and "What impacts does implementation have on school setting characteristics?" The major finding is that strong, committed leadership in the schools appears to increase the success of the implementation. Undergoing school improvement, especially in a school demoralized by a history of low achievement, can be difficult for teachers. Leaders who are committed to the process, and encourage, nudge, and reward teachers for their efforts are essential. In addition to instructional leadership, school administrators must show their commitment to the process by providing time for teachers to engage in the process. By hiring substitutes or rearranging class schedules so that curriculum alignment activities are worked into the daily or weekly schedule proves to staff the high priority placed on the initiative. In-depth interviews with staff will be conducted during the fall of 1999 in order to answer the second question.

The review and analysis of the data from the three surveys suggest that the schools in Rural County have some strengths to draw upon, but that there are areas in which the schools need to develop capacity if they are to succeed in their reform efforts.

Improving student performance in the long term takes enormous effort that is difficult to sustain over time. According to Michael Fullan, writing in Phi Delta Kappan in 1996, "To put it bluntly, existing school cultures and structures are antithetical to the kinds of activities envisioned by systemic reform. Thus, until these more basic conditions begin to change, the best networking efforts will fall short...Systemic reform mainly involves strategies that help develop and mobilize the conceptions, skills, and motivation in the minds and hearts of scores

of educators" (p. 422). The results from the surveys administered to the staff of the three Rural County Public Schools provide a picture of a school district that is grappling with daunting challenges but also is equipped with a number of strengths. In the spring of 1997, the Rural County Public Schools were composed of staff who believed they were good teachers, who believed they worked with good teachers, and who wanted to make a difference in children's lives. The staff wanted to grow professionally. However, structures within the schools were making it difficult for staff to function as a professional learning community because the structures did not support decision-making models that maximized teacher input and power.

The teacher empowerment measure administered in Rural County captured six components associated with empowerment. Teachers generally believed that four out of the six elements were present. Specifically, they held status with colleagues, participated in staff development and believed it was important, felt self-efficacious as educators, and believed they were having an impact on school life. These teachers did not have autonomy in scheduling their workday. This characteristic of empowerment is not necessarily essential, however. Most importantly, teachers experienced a lack of empowerment when defined as meaningful engagement in decision making. Without the power to make decisions concerning their work environment and student learning, teachers are not likely to develop a sense of ownership over the notion of turning the school into a high functioning learning community, and will be less committed to improvement initiatives.

Engaging teachers in decision making leads to the co-construction of the district's mission and purpose (Marks & Louis, 1997). This finding from previous studies is supported here. Teachers were ambivalent about the existence of a strong and shared vision. The school must achieve a critical mass of staff dedicated to the achievement of a common vision (Fullan, 1996). Most of the high school teachers confirmed that there is an accepted shared sense of purpose at the high school. Results from the SWPC Survey suggest that teachers at the elementary and middle schools were not as uniform or committed to their belief in a shared school mission.

An essential practice in a professional learning community is collaborative activity. Collaboration can and should exist at multiple levels. At the most manifest and frequent level is collaboration between teachers to share curricula and activities. In Rural County, only a modest amount of such collaborative activity was taking place during the 1996-97 school year. Teachers agreed with the general statement that there was a "great deal of cooperative effort among

staff." However, when asked about specific collaborative activities, there was far lower agreement that such activities were occurring. No more than two-thirds of teacher respondents at any school agreed that any specific collaboration effort was occurring. Collaboration during common planning periods appear to have been especially rare.

One way in which effective school districts utilize collaborative activity to their advantage is to advocate the coordination of course content across schools. In an increasing number of states, such coordination of content is becoming necessary as a means of responding to mandated standards, such as Virginia's Standards of Learning. As districts evaluate their curricula, teachers across grade levels and schools must learn to work together in developing K-12 curricula in which student skills and knowledge build upon each other as students progress through higher grades. In Rural County, half of the elementary school teachers (54%) reported on the SWPC Survey that they consciously attempt to coordinate course content across schools. However, only 44% of middle school teachers, and 33% of high school teachers reported coordinating course content across schools. Although teachers may have not reported high levels of coordination because there is only one school of each level in the district, there is also the likelihood that such coordinated activity was simply not occurring.

The results from the Deprivatization of Practice subscale of the SWPC indicated that very little cross-fertilization of idea was occurring in the schools. The modern teacher is confronted with complex and difficult tasks as he or she prepares an increasingly diverse population of students for a competitive and technologically sophisticated world. There is simply too much for one teacher to know.

According to Marks and Louis (1997), professional learning communities help faculties to develop a collective focus on student learning, and this focus directly predicts gains in student achievement. The teachers in the Rural County schools need to focus on developing their sense of collective responsibility for student learning. The ambivalence toward the statements concerning developing higher order and creative thinking skills in students is particularly disturbing. Although 74% of the elementary school teachers reported a focus on these skills, the percentages of middle and high school teachers who agreed that these were important learning goals in the district were much lower (between 45 and 61 percent).

Obviously, Rural County faces challenges in the coming years. There are many changes that need to be made in order to bring the school district, and its teachers and students, well prepared into the new century. The results from the SPES and SWPC Survey send a loud and

clear message to administrators that the teachers believe they make curriculum decisions, and that they want to learn how to improve their teaching. These teachers highly value professional development and participate in staff development activities when given the opportunity. They also feel empowered to make decisions in their own teaching.

A rubric, called the Indicators, was developed as a self-assessment tool to guide school administering through the implementation process. The Indicators were developed by examining the characteristics of effective schools. The Indicators were completed during the second year of implementation. The Indicator data provide information on the extent of implementation by the three schools in the district during the course of the school year, including rate of implementation, gaps in implementation, and total extent of implementation by year's end. An encouraging finding from tests of the Indicators is that schools with higher levels on the indicators of implementation had higher student achievement scores as measured by the Virginia Standards of Learning (SOL) exams.

Student achievement scores on the 1998 and 1999 Virginia SOL exams were analyzed. The data set is rich in that teacher assignment, SES status (via lunch status), ethnicity, and gender variables are included for grades 3, 5, 8, and high school. Furthermore, the SOL scores have been compared to the Stanford 9 exam scores, which are also administered in this district. Results indicate that, in subject areas in which the curriculum was aligned, pass scores increased dramatically, in some grade levels doubling from 1998 to 1999. In addition, in one grade level, significant differences between students in the four classrooms were found in the two SOL subject areas that had not undergone curriculum alignment, but not in the two subjects that had an aligned and balanced curriculum. This provides evidence that the ABC process can negate teacher assignment as a variable in student achievement. Although there were still differences between SES levels, the differences appear to be decreasing, and fewer differences in achievement scores disaggregated by gender were found.

The final research question concerns the ability of the ABC process to increase local capacity for continuous school improvement. Interviews have been conducted with school and district administrators to assess their current views on capacity. Data from these interviews, which provided information about capacity prior to this intensive site work, as well from observations of the project director and consultant over the past 2 years establish the developing story of ways in which the schools are slowly developing capacity.

Educational Significance

Educators have struggled with the issue of quality versus equity for decades. By focusing on the tools within their reach, the curriculum educators do not have to sacrifice one for the other. High expectations and high quality education are compatible with providing an equitable education for all students. Standards provide the destination; curriculum alignment provides the roadmap. Developing a professional learning community, capable of collaboration, reflection, and a focus on student learning, is the vehicle. When all are in place, even a low performing school system, populated with traditionally "low-achieving" populations can make great strides in achievement. Establishing an aligned and balanced curriculum is not a "quick-fix:" it is a whole school improvement effort and as such, takes years of dedication and commitment. But unlike many school improvement approaches, schools can quickly see measurable gains in student achievement. And isn't that one of the major goals of the public school system?